

**DEPARTMENT OF COMMUNITY SERVICES  
CARMEL, INDIANA**



[www.carmel.in.gov](http://www.carmel.in.gov)

**BUILDING GUIDE AND PLAN REVIEW FOR  
SINGLE FAMILY ROOM ADDITIONS**



**Building Commissioner: Jim Blanchard 317-571-2450**

**Inspectors:**

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**For a quick response to questions please call or visit the  
Building and Code Services Office:  
Inspector-On-Call – 317-571-2481  
Hours: Monday – Friday 8:00 am – 9:00 am.**

**This pamphlet is a guide to the most common questions, issues  
and common oversights. It is not intended nor shall it be  
considered a complete set of requirements.**

The use of this Guide is to help facilitate the plan review process. By following these guidelines you may expect your review turnaround, in most cases, to be 24 hours

#### How to Use this Guide:

1. **Review this Building Guide and Plan Review Handout.**
2. **Complete the following.**
3. **Complete this Building Guide by filling in the blanks, and indicating on page 10 which construction details will be used. Builder/Owner should initial where indicated.**
4. **Provide 2 Plot Plans (site plans) showing dimensions of your project or addition and its relationship to existing buildings or structures on the property and the distance to existing property lines drawn to scale. (See example on page 4, worksheet on page 5)**
5. **Show building elevations. Minimum of 2 sides i.e., a front and side view. See page 11.**
6. **Fill out Wall Section (See page 10)**
7. **Provide Floor Plan (See sample page 12)**
8. **Fill out a Building Permit Application.**

The majority of permit applications are processed with little delay. The submitted documents will help determine if the project is in compliance with building safety codes, zoning ordinances and other applicable laws.

#### Inspections Required:

Footings	Grade stakes are required to be in place. All water should be pumped out and footings scraped clean to solid ground. Forms are to be complete and level. Tarps and insulation covers shall be removed for inspection. Make sure you are staying BEHIND the Building Line. <b>INSPECTION MUST BE APPROVED BEFORE YOU POUR.</b>
Rough In	<b>DO NOT INSULATE</b> prior to inspection and approval. Inspection is to be approved <b>BEFORE</b> Insulation and wall coverings are installed. Structure is to be WEATHER TIGHT: Windows and doors installed and, roofing complete. All draft stops and fire blocking must be installed for this inspection. Access to all areas must be provided. All rough-in work should be completed. (Plumbing, Electrical and HVAC)
Final	All electrical, plumbing, and mechanical work, as well as any items that are determined to be in the interest of public health, safety, and welfare shall be 100% complete prior to approval of the Final inspection or issuance of a Certificate of Occupancy. Final grading, rear, and side swales shall be completed PRIOR to the final, "weather permitting." After the Final inspection is performed and approved, a Temporary or Full Certificate of Occupancy (C/O) may be issued. Temporary C/O's will require a final re-inspection of incomplete items. <u>A minimum of 24 hours is required before the full Certificate of Occupancy will be issued.</u> <b>**ANY PRODUCT OR PERSONAL PROPERTY OF ANY TYPE CONSTITUTES OCCUPIED. LATE FEES WILL APPLY.**</b>

To monitor progress of your permit and to check inspection results please go to:  
[www.carmel.in.gov](http://www.carmel.in.gov)

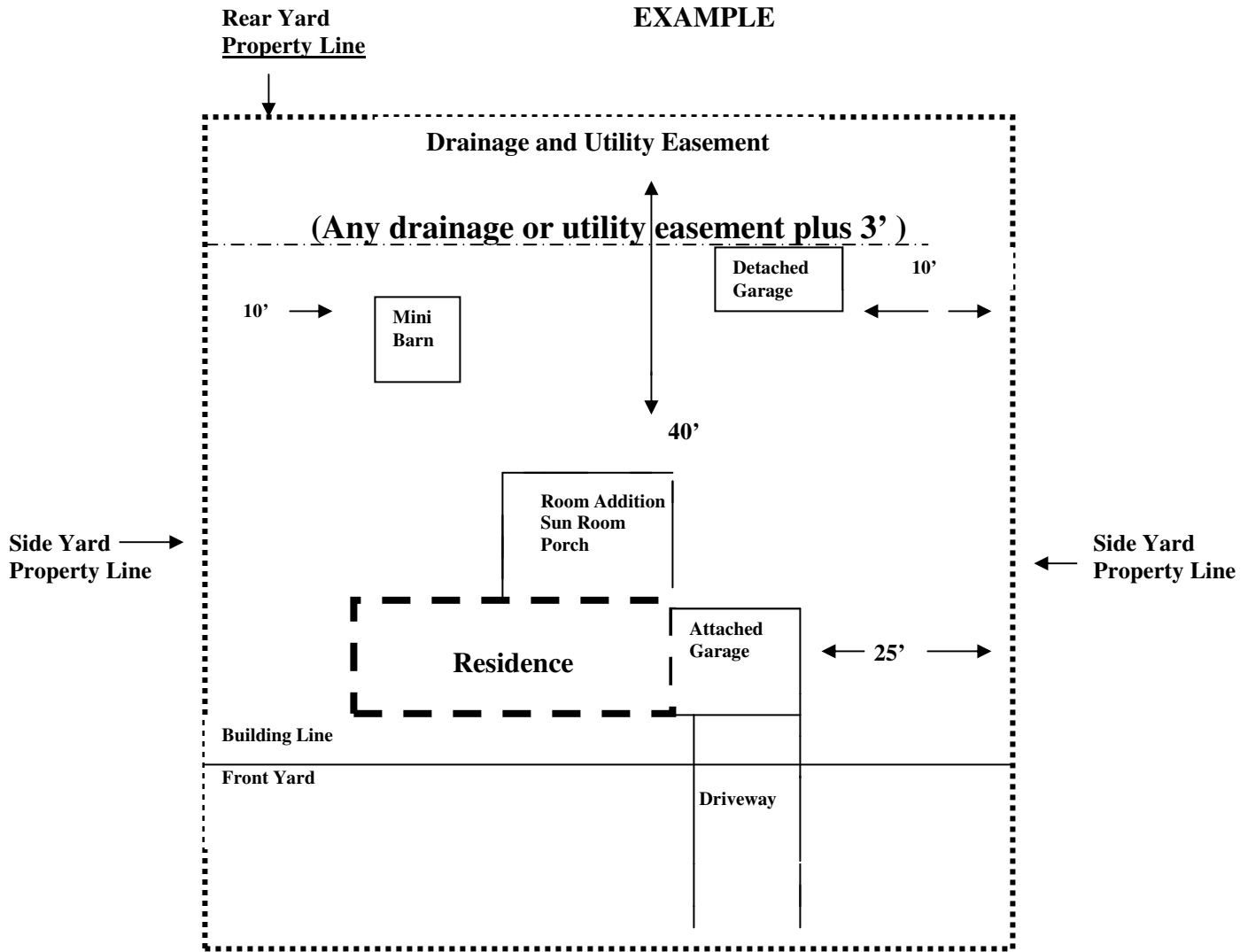
Then follow the steps listed below.

1. Click on **Department of Community Services**.
2. On drop down screen click on first box indicating **Department of Community Services**.
3. Under **Quick Links**.
  - a. Click on **“One Stop Shop”**
4. Click on **Permit Status**. This brings you to **“On-Line Permitting & Code Enforcement.”**
5. Left side of screen, click on **Permit Status**.
6. Type in **Permit Number** and/or **Street Address**.
7. Click on **Permit Number** box.
8. Click on **Search**.
9. This is **Permit Details Screen**.
  - a. Click on the **More Information** screen.
10. On the left side of the screen click on area of information needed i.e., **Inspections**.

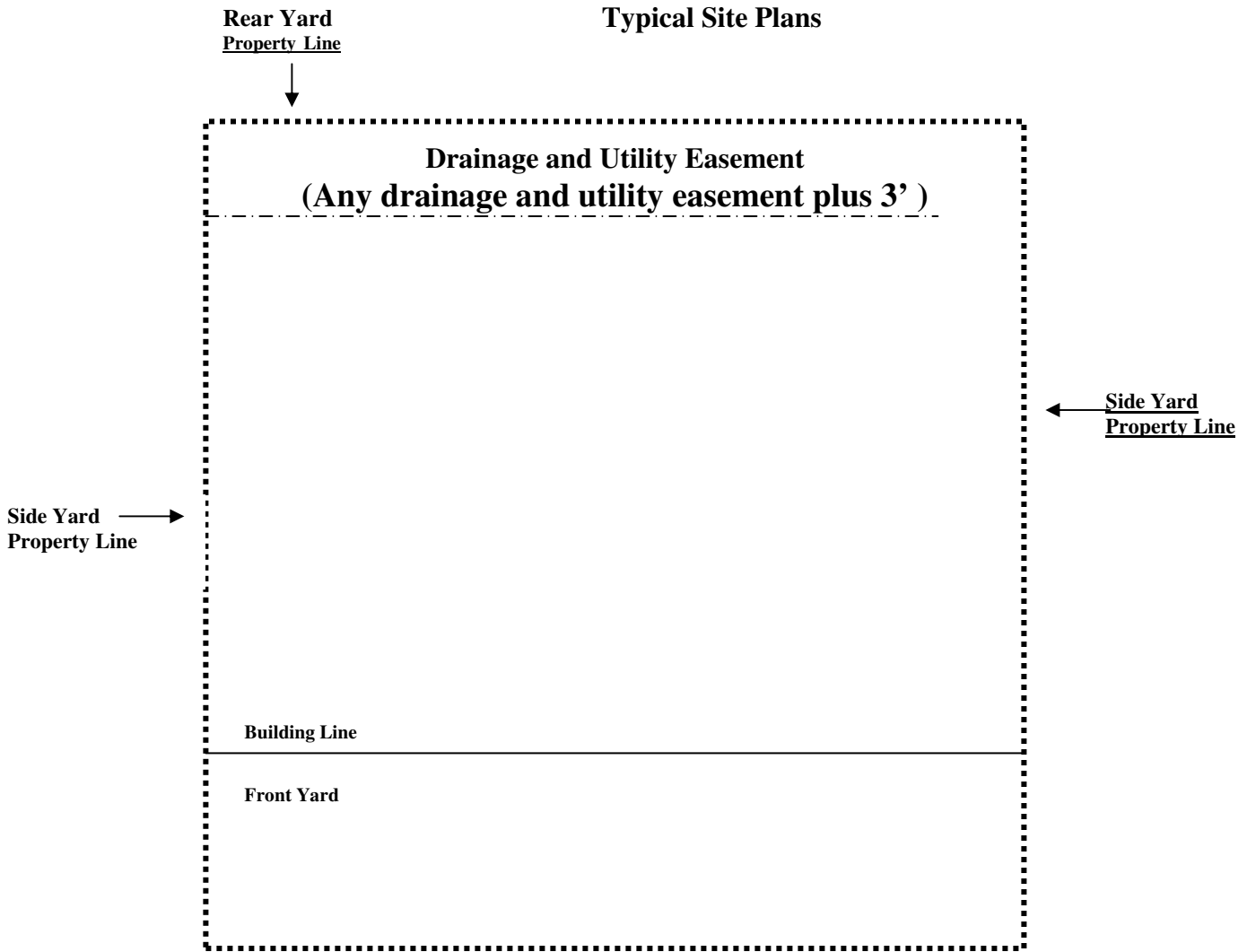
## Most Common Overlooked Building and Safety Codes

1. Strapping top plates to existing structure.
2. Correct anchor bolts/strapping needed.
3. Nail plates required on holes bored within 1 ¼” to face of stud for electrical wiring.
4. 18 x 24 inch access required for crawl entry.
5. Tempered glass in windows within 24” of doors.
6. Exterior grading incomplete.
7. Weep holes incomplete or not installed to code.
8. Metal junction boxes not grounded.
9. Crawl space vents not in place.
10. Steps to exterior incomplete.

**TYPICAL PLOT PLANS  
(Site Plan)  
EXAMPLE**



## Typical Site Plans



### Set Back Distances:

Please Circle applicable zoning district:

Zoning District:	S-1	S-2	R-1	R-2	R-3	R-4
Min Front Yard:	40'	35'	35'	35'	30'	25'
Min. Side Yard:	10'	10'	10'	5'	5'	5'
Agg.Side Yard:	30'	25'	20'	15'	15'	10'
Min. Rear Yard:	20'	20'	20'	20'	20'	20'
Min Lot Width:	120'	100'	100'	80'	60'	50'
Max Lot Coverage:	35%	35%	35%	35%	35%	35%

## Typical Wall Section:

The following is a listing of all required **minimum** R-Values.

Wall	R-13
Ceiling	R-30
Floor	R-25
Box or RIM Joist	R-22
Slab perimeter	R-10 4 ft. wide
Crawlspace	R-10 2.7 ft. down
Basement	R-10 7 ft. down

Exterior joints, seams and penetrations in the building envelope, which are sources of air leakage shall be sealed with caulking, gaskets, tape, or covered with a moisture vapor-permeable house wrap. Openings between the building envelope and conditioned space, such as at recessed lights, attic and crawlspace panels, tub and showers and electrical penetrations shall be sealed with materials which will allow for expansion and contractions of the construction materials.

# City of Carmel

## When are smoke alarms required?

### Definitions:

**Living Space:** A space protected from the weather, used all year long and that has heating, insulation and all required electrical convenience receptacles and lights.

**Addition:** Adding living space to an existing home, which requires a foundation, roof and walls, heat, insulation and electrical receptacles and light(s). Windows may be required.  
**A Building Permit and Smoke Alarms are required.**

**Example:** Unfinished basement to living space;  
attic to living space;  
new addition of living space onto existing home;  
porch or patio to living space;  
conversion of any room to a bedroom;  
living space over a detached or attached garage.

**Remodel:** Any removal of drywall, plaster, paneling, change in structural or non-structural walls.  
Relocation of bathroom and/or kitchen plumbing fixtures. Adding new bathroom, kitchen, bedroom.  
Changing weight bearing capacity or any floor, roof or wall. Or, any other work for which a permit is required.  
Any structure damaged by fire, wind, lightning, storm or other accident.  
**Building permit and smoke alarms required.**

### Smoke Alarms MUST be installed in each bedroom and on each floor.

Smoke alarms are to be powered from the home's electrical system and must be interconnected. Refer to City of Carmel Smoke Alarms 2005 document in this packet. (Indiana One and Two family Dwelling Code Section 313)

**Exception:** Where there is no access to the attic and/or basement because of finished ceilings or floors (crawl space not included). A battery operated system in accordance with the Indiana One and Two Family Dwelling Code Section 313 can be used.

The following projects **DO NOT** require smoke alarms.

**Kitchen Remodel** Change of cabinets and counter top, sink bowl, faucet and disposal in existing locations. Replacement of wood or vinyl floor covering. No clay or ceramic floor covering. No walls added or removed, no island work station. All receptacles to be GFCI protected.  
**No plan review and no permit required. Home Owners Statement required.**

**Bath Remodel** Change of existing plumbing fixtures, floor covering and wall cabinet.  
No plumbing fixtures relocated. No walls moved. No window(s) added or removed.  
No receptacles or light fixtures added. No hydro massage bathtub.  
All receptacles must be GFCI protected.  
**No plan review and no permit required. Home Owners Statement Required.**

**Enclosed Porch:** Also known as: **Sun Room or 3 Season Room.**  
A porch that has a roof. Walls are being installed or altered to hold screen and/or windows and doors, **AND, is completed separated from the house by doors and/or walls and windows.**  
Ceiling fan/light with switch permitted.  
No heating system or connection to existing heating system.  
No added electrical receptacles.  
**Plan Review and Building Permit required.**

**Other:** Detached garage. Attached garage. Porch. A deck that is more than 30 inches above the ground.  
Pool, spa or hot tub. Pool House.  
**Plan Review and Building Permit required.**  
Replacement of windows, 30 inch or less deck, bathroom or kitchen remodel

## SMOKE ALARMS 2005

Section R313; smoke alarms. Each smoke alarm shall be listed:

R313.2 Required smoke alarm locations. At least one smoke alarm shall be installed in each of the following locations:

1. In the living area remote from the kitchen and cooking appliances. Smoke alarms located within 20 feet horizontally of a cooking appliance must incorporate a temporary silencing feature or be photoelectric type.
2. In each room designed for sleeping.
3. On the ceiling of the upper level near the top or above each stairway, other than a basement stairway, in any multistory dwelling. The alarm shall be located so that smoke rising in the stairway cannot be prevented from reaching the alarm by an intervening door or obstruction.
4. On the basement ceiling near the stairway.

R313.2.1 Alterations and additions. When interior alterations or additions requiring a permit occur, **OR** when one or more sleeping rooms are added or created in existing dwellings, the individual dwelling unit shall be provided with smoke alarms.

The Alarms shall be located in the same places as required for new dwellings. The smoke alarms shall be interconnected and hard wired.

R313.5.2 Interconnection. When more than one smoke alarm is required to be installed within an individual dwelling unit, the alarm devices shall be interconnected in such a manner that the actuation of one alarm will activate all of the alarms in the individual unit.

### EXCEPTIONS:

1. Smoke alarms in existing areas shall not be required to meet the requirements where the alterations do not result in the removal of the interior wall or ceiling finishes exposing the structure unless, there is an attic, crawlspace, or basement available that could provide access for hard wiring and interconnection without the removal of interior finishes.
2. Repairs are exempt from the requirements of this section.

R313.3 Prohibited smoke alarm locations. A smoke alarm required under this section shall not be placed:

1. Within 3 feet horizontally from any grille moving conditioned air within the living space or
2. In any location or environment that is prohibited by the terms of the listing.

R313.4 Mounting requirements. Smoke alarms according to their listing installation instructions and the requirements of this section.



R313.4.1 Flat Ceilings. In rooms with flat, peaked sloping or single slope ceilings with a slope of less than 1.5/12, smoke alarms shall be mounted either:

1. On the ceiling at least 4 inches from each wall; or
2. On a wall with the top of the alarm not less than 4 inches below the ceiling and not farther from the ceiling than 12 inches or the distance from the ceiling specified in the smoke alarm manufacture's listing and installation instructions, whichever is less.

R313.4.2 Peaked Sloping Ceilings. In rooms with peaked sloping ceilings with a slope of 1.5/12 or greater, smoke alarms shall be:

1. Mounted on the ceiling or wall within 3 feet measured horizontally, from the peak of the ceiling;
2. At least 4 inches measured vertically, below the peak of the ceiling; and
3. At least 4 inches from any projecting structural element.

R313.4.3 Single Slope Ceilings. In rooms with single slope ceilings with a slope of 1.5/12 or greater, smoke alarms shall be:

1. Mounted on the ceiling or wall within 3 feet measured horizontally, of the high point of the ceiling; and
2. Not closer than 4 inches from any adjoining wall surfaces or any projecting structural element.

R313.4.4, 313.4.1, 313.3.2 Visible and tactile notification appliances. SEE CODE.

R313.5 Connection to Power Source. Each smoke alarm shall be powered from:

1. The electrical system of the home as the primary power source and a battery as a secondary power source; or
2. A battery rated for a 10 year life, provided the smoke alarm is listed for use with a 10 year battery.

R313.5.1 Circuitry. Each smoke alarm whose primary power source is the home electrical system shall be mounted on an electrical outlet box and be connected by a permanent wiring method to a general branch circuit.

# Single Family Addition and Garage

Note: For roofs with slopes between 2:12-4:12 follow manufacturers instructions for low slope application of roofing material.

Truss Spacing \_\_\_\_\_ inches on center  
\_\_\_\_\_ x \_\_\_\_\_ Ridge Board  
(Example: 2 x 8)

2x \_\_\_\_\_ rafter \_\_\_\_\_ in. O.C.

Rafter Spacing \_\_\_\_\_ inches O.C.

Sheathing \_\_\_\_\_  
(Example: ½" exterior plywood)

Underlayment \_\_\_\_\_  
(Example: 1 layer 15# felt)

Roof Covering \_\_\_\_\_  
(Example: Class A 3 tab shingles)

Pitch \_\_\_\_\_:12  
(Example 5:12)

Ceiling Insulation \_\_\_\_\_ N/A \_\_\_\_\_  
(Example: R-38)

2x \_\_\_\_\_ Ceiling Joists @ \_\_\_\_\_ O.C.  
(Example: 2x8 @ 24" O.C.)

Double 2x \_\_\_\_\_ Top Plate  
(Example: 2 x 6)

Span \_\_\_\_\_  
(Example: 23'5")

Ceiling Height \_\_\_\_\_  
(Example: 8')

Siding \_\_\_\_\_  
(Example: lap or T-111)

Building Wrap \_\_\_\_\_  
(Example: Tyvek)

Wall Sheathing \_\_\_\_\_  
(Example: ½" exterior plywood)

2x \_\_\_\_\_ Studs @ \_\_\_\_\_ O.C.  
(Example: 2 x 6 @ 24" O.C.)

Cont. 2x \_\_\_\_\_ Sill Plate  
(Example 2 x 4)

2x \_\_\_\_\_ Joists @ \_\_\_\_\_ O.C.  
(Example: 2 x 10 @ 24" O.C.)

Footing Size \_\_\_\_\_ x \_\_\_\_\_

Anchor bolts/straps

30" below undisturbed soil

Grade is to be 6" min. from structure in first 10 ft.

**Check One**  
☐ Concrete/Block Foundation  
☐ Monolithic foundation under 721 sq. ft.  
☐ Basement

## BUILDING ELEVATIONS

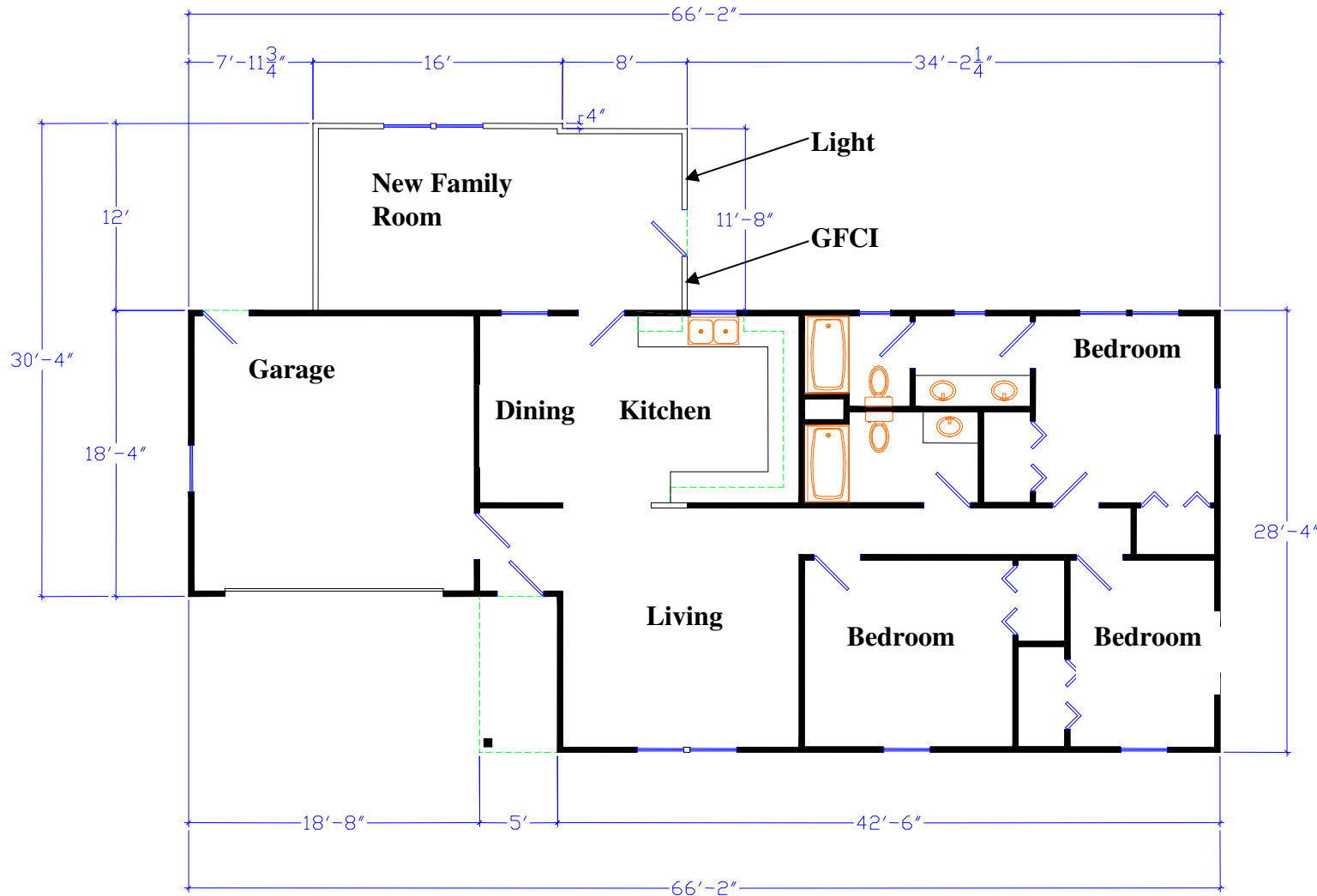
# Single Family Residential Handout

## Sample Floor Plan

### Notes:

- A. New 3'-0" x 6' x 8" door in existing wall.
- B. Existing door removed, opening covered with drywall both sides.
- C. New 5'-0" x 4'x0" cased opening (replaces existing window).
- D. New patio door with tempered glass.
- E. New 6'-4" wide 4'-8" casement windows

(Example: 2) 2" x 10" headers at new window and door openings.



Initial: \_\_\_\_\_